



Reclamation Research Unit

Department of Land Resources and Environmental Sciences

Montana State University

106 Linfield Hall, Bozeman, MT 59717-2910

Phone: 406/994-4821 FAX: 406/994-4876

<http://www.montana.edu/reclamation>

Distributed Via: USPS _____

FAX _____

FED EX _____

EMAIL _____x_____

Date: April 18, 2006

To: Sue Sillick

From: Stuart Jennings

Re: Progress Report 11. *Evaluation of Organic Matter Addition and Incorporation on Steep Cut slopes, Phase II: Test Plot Construction and Performance Monitoring*

The eleventh progress report of Phase II of the above referenced project is attached. The narrative describes work occurring between January 1, 2006 and March 31, 2006.

Quarterly Progress Report #11
For the period January 1, 2006 – March 31, 2006

**EVALUATION OF ORGANIC MATTER ADDITION
AND INCORPORATION ON STEEP CUT SLOPES**

***Phase II: Test Plot Construction and
Performance Monitoring***

Prepared For:

Montana Department of Transportation
P.O. Box 201001
Helena, MT 59620-1001

Prepared By:

Reclamation Research Unit
Department of Land Resources and Environmental Sciences
Montana State University
Bozeman, MT 59717-2910



April 2006

Task Analysis and Discussion

No field work was performed during the past quarter. Project progress occurred principally due to report writing and summarization of laboratory results from soil samples collected during fall 2005. Stuart Jennings attended a meeting in Helena on compost utilization convened by the Montana Dept. of Environmental Quality, Pollution Prevention Bureau. A PowerPoint show on compost utilization in reclamation projects, including transportation, was presented. The meeting was convened by Technical Panel member Brian Spangler, and attended by Phil Johnson who spoke about future MDT projects and potential compost utilization.

Task I—Site Sampling

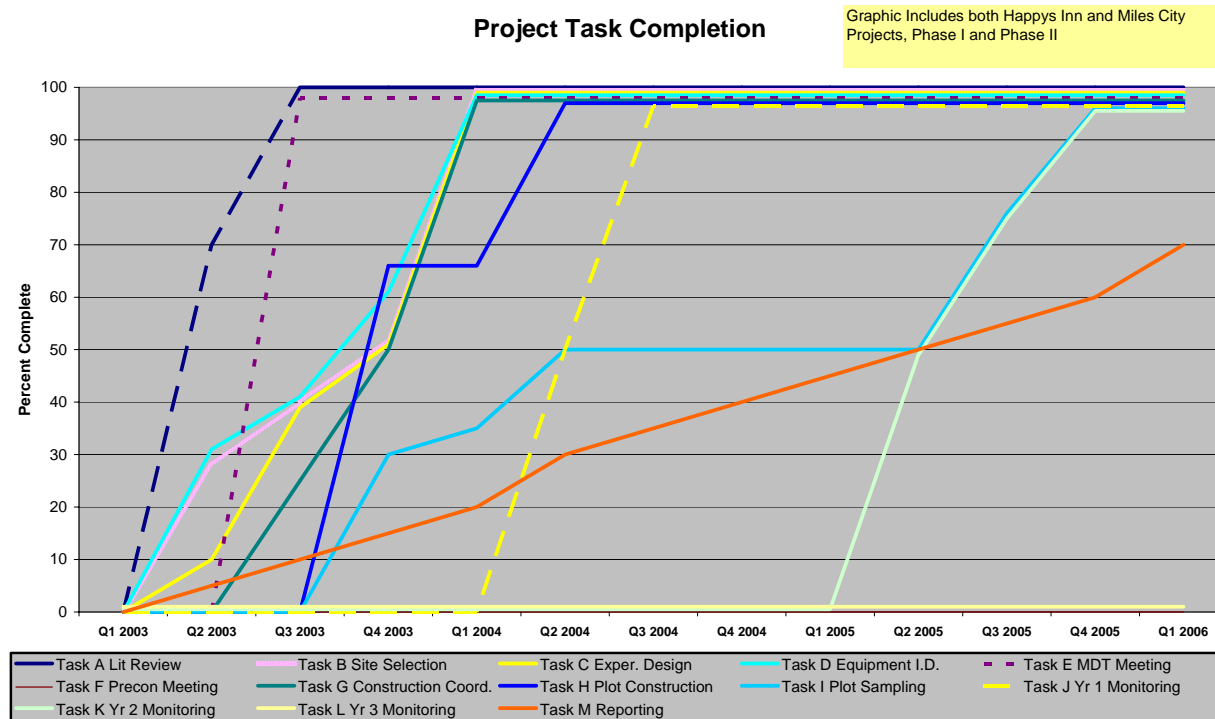
Soil samples submitted for laboratory analysis during late 2005 were analyzed by the MSU Soil Testing Lab for determination of fertility levels (N, P and K) as well as organic matter content. Saturated paste extracts and determination of soil pH and electrical conductivity was performed in the Reclamation Research Unit Laboratory. These results were synthesized and summarized in Task M, Reporting.

Task M - Reporting

This eleventh quarterly report satisfies the periodic reporting requirement of the contract. Additionally, work on the final report was performed during the recent quarter including summarization of post-construction soil sampling results. The data were synthesized into a draft paper for the Billings Land Reclamation Symposium. The paper is titled “Native Plant Establishment on Highway Cut Slopes using Compost Application” and includes some of the preliminary findings from this research project. Phil Johnson of the Montana Dept. of Transportation is a member of the coordinating committee for this conference planned for June 2006. Phil and I are also planning a companion tour of the Miles City research plots during the conference.

Schedule and Degree of Completion—all research sites

<i>Task Description</i>	<i>Budgeted Total Phase II</i>	<i>Proposed Schedule</i>	<i>Actual Schedule</i>	<i>Degree of Completion</i>	<i>Estimated Expenditure during current quarter</i>
Task B Site Reconnaissance	\$678	Q3, 2003	Q3 2003, and Q1 2004	100%	0
Task C Experimental Design	\$407	Q4, 2003	Q4 2003, and Q1 2004	100%	0
Task G Construction Schedule Coordination	\$377	Q3, 2003	Q1, 2004	100%	0
Task H Plot Construction	\$36,087	Q4, 2003	Q4, 2003	100%	0
Task I Site Sampling	\$8761	Q4, 2003 and Q3 2005	Q4, 2003 Q3,Q4 2005	100%	0
Task J Year 1 Monitoring	\$13,083	Spring and Fall, 2004	Spring and Fall, 2004	100%	0
Task K Year 2 Monitoring	\$15,912	Spring and Fall, 2005	Spring and Fall, 2005	100%	0
Task L Year 3 Monitoring	\$16,065	Spring and Fall, 2006	Spring and Fall, 2006	0%	0
Task M Reporting	\$16,380	Quarterly and Final Report, Fall 2006	ongoing	70%	\$6100



Problems and Resolution

No problems were encountered during the current quarter.

Accomplishments

A paper was prepared for the Billings Land Reclamation Symposium that includes preliminary findings from this research project.

Fiscal Expenditure

Amount Spent by budget category:

<i>Cost Category</i>	<i>Spent prior to current quarter (\$)</i>	<i>Spent during the current quarter (\$)</i>	<i>Total spent to date (\$)</i>
Labor and Benefits	\$46,309	\$5065	\$51,374
Operational Expenses	\$7612	\$112	\$7724
Subcontracted Services	\$16,764	0	\$16,764
Indirect Charges	\$13,038	\$986	\$14,024
<i>Total Spent</i>	<i>\$83,723</i>	<i>\$6163</i>	<i>\$89,886</i>

Total Project Award \$108,975 (original budget) + \$9031 (modification April 2004)
 \$118,006 (total award)

Amount Remaining \$28,120